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(12) # EUROPEAN PATENT APPLICATION

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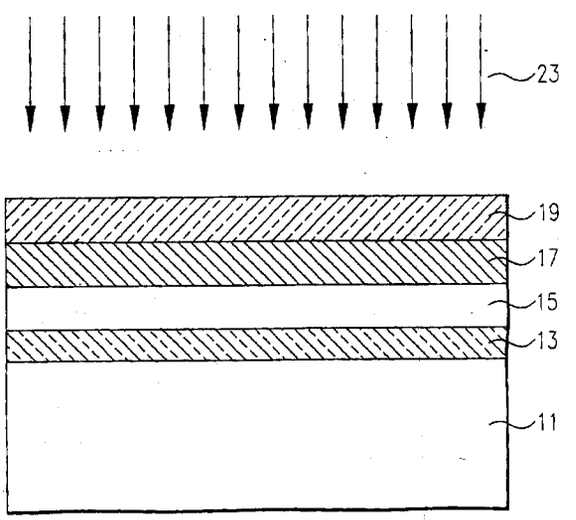
(54) **Transistor fabrication method.**

(57) A method of forming p^+ transistor gates is disclosed. A polysilicon layer (e.g., 15) is covered with an amorphous silicide layer (e.g., 17) which prevents penetration of p type dopants through the gate oxide (e.g., 13). The silicide (e.g., 17) may be covered by a dielectric (e.g., 19) which is formed at a temperature low enough to prevent crystallization of the silicide.

FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 92 31 1092

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X	EP-A-0 224 199 (SIEMENS AG) 3 June 1987 * column 2, line 36 - column 4, line 37; figure 1 *	1,2,4,5, 8,9	H01L21/28 H01L21/3215 H01L21/82
X	JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B (MICROELECTRONICS PROCESSING AND PHENOMENA), vol. 5, no. 2 , 1 March 1987 , WOODBURY, NEW-YORK,US pages 508 - 514 Gierisch H et al 'Dopant diffusion from ion-implanted TaSi2 into Si' * page 508, left column; figure 12 * * page 512, right column - page 513, left column *	1,4-8	
X	IEEE TRANSACTIONS ON ELECTRON DEVICES vol. 36, no. 6 , June 1989 , NEW YORK US pages 1087 - 1093 XP50022 Nygren S et al 'Dual-type CMOS gate electrodes by dopant diffusion from silicide' * page 1087, right column - page 1088, left column; figure 2 *	1,4-7	
X	JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY: PART B vol. 7, no. 1 , 1 January 1989 , NEW YORK US pages 120 - 126 XP54839 Schwalke U et al 'Boron diffusion within TaSi2/poly-Si gates' * page 120, right column - page 121, left column; figure 1 *	1-10	

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TECHNICAL FIELDS SEARCHED (Int.Cl.5)

H01L

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	10 February 1994	Gelebart, J

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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X	EXTENDED ABSTRACTS OF THE 19TH CONFERENCE ON SOLID STATE DEVICES AND MATERIALS, 25 August 1987 , TOKYO, JP pages 423 - 426 Suguro K et al 'Impurity effect on reduction in thermal stress of titanium silicides' * page 423, right column - page 424, left column * * page 426, left column * -----	1,3-8	

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